

WORKS LIKE WOOD
LASTS A LIFETIME



KING
STARBOARD **ST**

Fabrication and Finishing

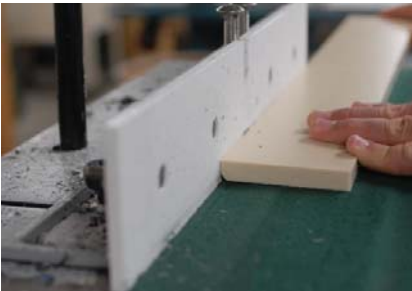
- Use standard woodworking tools: table saws, table routers, drills, blades and bits. Carbide router bits with two to four flutes are recommended.



- With a 1/2" diameter router bit, feed rates of 12-16 feet per minute are normal. Rates must be slower for material that is 1/2" thick or thicker. Larger bits have higher tip speeds and RPM adjustments may be necessary.



- Cut with a circular saw using a 40-60T. Expect a feed rate of 12-16 feet per minute.
- No surface finishing is required. King StarBoard ST comes with a textured matte finish on both sides.



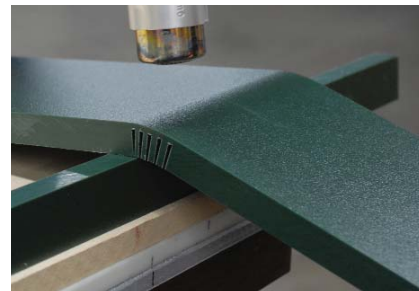
- Edges may be finished with a router. Sanding may be used, but a very fine sandpaper is required to avoid creating small, hard-to-clean scratches.



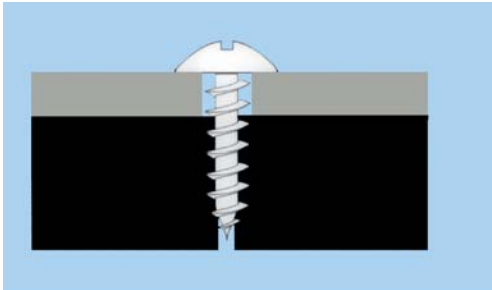
- Because King StarBoard ST sheet products are designed to resist water and grime, they cannot be painted and the use of adhesives is not recommended. If gluing is absolutely necessary, products such as 3M's Scotch-Weld DP-8005 and Lord Corporation's 7540-AB have been used with some success. Special welding rods, designed for use with polymer sheets, are also available.



- Use standard fasteners with oversized holes. Drill pilot holes first, followed by an oversized hole to allow for expansion and contraction. Use press-in threaded inserts for applications where repetitive motion is expected, such as a door hinge.



- Mild heat applied with a heat gun will help mold the sheets for curved installations. Sharper corners must be notched and then heat shaped.
- Hide fasteners with plugs made from King StarBoard ST using a standard wood-plug cutter. Make the plug slightly larger than the hole for a press fit.



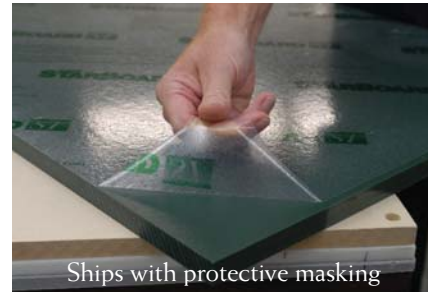
- Test applications for unforeseen complications, such as expansion/contraction issues (note: different colors react differently to heat). King StarBoard® ST contracts and expands at a rate of 6×10^{-5} in./degree F, changing approximately 1/32 inch for every foot of length or width over a 40-degree temperature range.

Cleaning and Maintenance



- King StarBoard ST sheets are made to maintain their color and finish for the lifetime of the application. Only routine cleaning or pressure washing with common detergents is required.
- Nylon scrub pads and brushes should be used with care because excessive force can mar the finish.
- For resistant stains, apply bleach and allow it to soak in.
- Use citrus cleaner, alcohol or mineral spirits to remove grease or oil stains.
- Automotive silicone spray products or household furniture polish can help to hide scratches in the surface. To prevent slipping, do not use these products on walking surfaces.

Care and Storage



Ships with protective masking

- Store the sheets flat on a level surface.
- Keep away from teak oil and other products that can stain the finish.
- Use china markers or water-based markers to draw patterns. Pen marks can usually be removed with household cleaners.
- Keep away from heat sources that exceed 180 degrees F.
- Because there is no grain, parts can be cut from any area of the sheet. Save the scraps for small parts, shims, spacers and plugs.
- Remnants may be eligible for recycling. Contact your distributor or King Plastic Corporation for details.



Use screws for secure assembly



Use familiar tools and techniques

Easy to fabricate with standard woodworking tools

You Will

- Cut it, bend it or fabricate it
- Sand it and engrave it
- Use standard woodworking tools
- Make plugs from it
- Create a finished edge
- Heat-weld it
- Easily clean it (including pressure wash)

It Will

- Hold mechanical fasteners
- Never need maintenance
- Finish cleanly
- Contract & expand
- Resist most stains

It Is

- Environmentally stabilized
- A "one-step" material, easy to fabricate
- Available in eight standard colors
- Impervious to most chemicals
- Made to last a lifetime
- Protected with a masking on one side
- Recyclable
- An ideal material for any "wet" areas
- Available in a 54" x 96" sheet

It Has

- A matte finish on both sides
- Solid color throughout the sheet
- Color and tolerance consistency
- A thousand uses

You Won't

- Paint it or use normal glues
- Stain it or damage it with fuel or oil spills
- Produce dust when fabricating it

It Will Not

- Rot, delaminate or swell
- Retain odors, splinter or fade
- Easily scratch, scuff or wear

It Is Not

- A structural material
- Expensive
- An appropriate countertop material

It Does Not Have

- A smooth texture
- A grain that needs matching



*Custom colors available. Sample colors approximate.

The specifications and quality you demand

King StarBoard® ST

Standard Sheet Sizes

Standard Gauge (inches)

1/4 3/8 1/2 3/4 1 1 1/2

Standard Gauge (mm)

6.4 9.53 12.7 19 25.4 38.1

Approximate Weight (pounds)

45 67.5 90 135 180 240

Approximate Weight (kilos)

20.42 30.62 40.85 61.25 81.65 108.9

Sheet Size (inches)

54 x 96 48 x 96

Sheet Size (mm)

1372 x 2438 1219 x 2438

Custom sheet sizes and gauges available.

Tensile Strength (PSI): ASTM D638 4500

Flexural Modulus (PSI): ASTM D790 225,000

Screw Holding Strength (lbs.): ASTM D1761 787

Izod impact Strength (ft-lbs/in²): ASTM D256 1.4

Weight (lb/Cubic Inch): .034

Scratch & Mar Resistance: Internal test method shows a 295% improvement over non-ST matte finish.

King Starboard® ST is made entirely from FDA and USDA-approved materials.

Now Available with King MicroShield™

King MicroShield™ is a new kind of antimicrobial protection upgrade now available in many of King Plastic Corporation's polymer sheets, slabs and massive shapes. King MicroShield helps products stay cleaner between cleanings and inhibits the growth of product-damaging microorganisms, including bacteria, algae and fungi on the surface.

Microbe cell walls that come into contact with King MicroShield are destroyed on contact, without creating opportunities for adaptive or resistant strains to form. Because the antimicrobial agent is bonded at the atomic level

throughout the sheet, it will not leach out of the product. This means the agent retains its effectiveness throughout the life of the product and does not harm the environment. It is safe, non-toxic and non-hazardous to ship and handle. The product is EPA-registered and listed with the FDA as a modifier to medical devices.

Products made using King Plastic Corporation's polymers with King MicroShield are easy to clean, disinfect and keep hygienic using standard cleaning procedures. Constant use of cleaning solutions will not affect any King Plastic polymer produced with King MicroShield.



King MicroShield™
Antimicrobial Polymer Sheet



King StarBoard® ST is:

- Ideal for all types of commercial and residential outdoor cabinets, furniture and storage
- Environmentally stabilized and made to last a lifetime
- Resistant to common molds and mildew
- Easy to clean and chemical-resistant. The sheets will not rot, splinter, swell, weaken or delaminate, although minor expansion and contraction must be accounted for in the designs
- Highly scratch-resistant
- No finishing required
- Easy to fabricate using familiar woodworking tools and techniques. You can even make plugs to hide counter-sunk screws
- No glue required
- Resistant to the strongest chemicals
- Handled like finished plywood, with no finishing required
- Designed for excellent screw holding strength and can be bent using back-cut techniques and heat
- A solid material, perfect for routing cabinet face V-grooves, edging, etc.
- Protected with masking to prevent damage during fabrication
- Parts can be welded together to form a single homogenous component
- Cabinets made from King StarBoard qualify for LEED Green building rating
- Over 4 times the joint strength rating of MDF. (Butt joint: MDF glued and screwed together, StarBoard ST is only screwed together)

Imagine the possibilities for your business

Cabinet and furniture pros everywhere are discovering exciting new business opportunities in the fast-growing outdoor living category and commercial markets, thanks to a super-tough polymer sheet stock called King StarBoard® ST.

Now you can build profits by creating an outdoor living space for your customers that's tough enough to last a lifetime, yet luxurious enough for even the most gracious homes.

Over the past 20 years, the King StarBoard family of polymer sheets has changed the way boatbuilders think about their designs. Its rich factory finish, immunity from rot and environmental stabilization have opened up a world of innovation that traditional building materials simply can't match. Now, it's bringing marine-grade toughness to the building trades market.

King StarBoard ST is formulated to meet the exacting needs of outdoor kitchen and cabinet professionals. The sheets are easy to fabricate using familiar woodworking tools and techniques, last a lifetime without refinishing and are available in today's most popular colors.

Common applications include:

- Outdoor Kitchens
- Outdoor Furniture
- Store Fixtures/Displays
- Marine/RV Applications
- RTA Furniture
- Signs, Awards & Plaques
- Medical Facilities
- Laboratories
- Wet & Moist Areas
- Pool Areas
- Pet Facilities
- Schools
- Amusement Parks
- Garage Cabinets
- And More





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